ABSTRACT

METHOD OF COMPUTING THE PITCH NAMES OF NOTES IN MIDI-LIKE MUSIC REPRESENTATIONS

The invention described here consists of an algorithmic method called *ps13* that reliably computes the correct pitch names (e.g., C♯4, B♭5 etc.) of the notes in a passage of tonal music, when given only the onset-time and MIDI note number of each note in the passage. The *ps13* algorithm has been shown to be more reliable than previous algorithms, correctly predicting the pitch names of 99.33% of the notes in a test corpus containing 1729886 notes and consisting of 1655 movements from works by 9 baroque and classical composers. This was shown to be significantly greater than the percentage of notes in the same large corpus spelt correctly by the algorithms of Temperley, Cambouropoulos and Longuet-Higgins. *ps13* is faster than the algorithms of Temperley and Cambouropoulos and requires less information in its input than Temperley's algorithm.